

CLAIMS

1. A transmit line driver comprising:
a DAC receiving a digital input and providing an analog output;
wherein the line driver is reconfigurable between a current mode of
5 operation and a voltage mode of operation.
2. The transmit line driver of claim 1, wherein the current mode of operation
includes first or second current sub-modes of operation.
- 10 3. The transmit line driver of claim 2, wherein the DAC provides a current
output.
4. The transmit line driver of claim 3, wherein the current output is used to
drive the line directly.
- 15 5. The transmit line driver of claim 3, further comprising a current mirror
coupled between the DAC and the line that mirrors the current output of the DAC.
6. The transmit line driver of claim 5, wherein the current mirror adds gain
20 to the current output of the DAC.
7. The transmit line driver of claim 6, wherein the gain of the current mirror
is programmable.
- 25 8. The transmit line driver of claim 1, wherein the DAC includes full-scale
current which is programmable.
9. The transmit line driver of claim 1, wherein the driver includes a
quiescent current which is programmable.

10. The transmit line driver of claim 1, further including first and second current mirrors, first and second resistors, first and second bipolar transistors, coupled between the DAC and the line, when the line driver operates in the voltage mode of operation.

5 11. The transmit line driver of claim 1, wherein the driver is configured to be placed on a high impedance state.

12. The transmit line driver of claim 1, further including first and second current mirrors coupled between the DAC and the line.